



SERVICE BULLETIN

Health Imaging Products

Eastman Kodak Company, Health Imaging, Rochester, NY 14650

SERVICE BULLETIN NO. 295

April 2001

3291 Kodak X-Omat 270 RA Integrated Processor in a Multiloader 300
3488 Kodak X-Omat 3000 RA Integrated Processor in a Multiloader 300 Plus
3227 Kodak X-Omat 180 LP Processor
3198 Kodak X-Omat 180 LPS Processor
3059 Kodak X-Omat 270 RA Processor
3228 Kodak X-Omat 480 RA Processor

5000 Circuit Board to Replace 500 Circuit Board:

Because some components needed to manufacture the 500 BOARD, P/N 981759, are difficult to obtain or no longer available, we will be using the 5000 CIRCUIT BOARD in the following processors:

(A Service Supplement that details all service information regarding the 5000 BOARD, is available for each model.)

Current Production Processors:

Processor Model	5000 Board Implemented into Production	Service Supplement Part No.	Service Supplement Available
3000 RA Integrated Processor in a Multiloader 300 Plus	s/n 150,250 March 2001	3E0810	April 2001
180 LP Processor	s/n 100,300 March 2001	3E0811	April 2001
180 LPS Processor	s/n 125,350 March 2001		

IMPORTANT: When converting a 3000 RA Integrated PROCESSOR in a MULTILOADER 300 Plus, serial number 150, 249 and below, to a 5000 BOARD, you must install Modification No. 10, P/N 9229250, for the MULTILOADER 300 Plus. Modification No. 10 is new OPERATING SOFTWARE for the MULTILOADER 300 Plus and is included with the 5000 BOARD CONVERSION KIT, 4E5490.

Converting a Processor from a 500 BOARD to a 5000 BOARD:

IMPORTANT: It is not necessary to convert a processor from a 500 BOARD to the 5000 BOARD, if the 500 BOARD is operating properly.

The 5000 BOARD, although slightly larger, will fit in the same location as the 500 BOARD. All the CONNECTORS and mounting points are the same. On the 180 LP/LPS processors only, minor movement of WIRES and WIRE TIES is required to install the 5000 BOARD. This is fully explained in the new Installation Instructions (P/N 6E5138) included with the 5000 BOARD.

After you install the 5000 BOARD, you will have to download new OPERATING SOFTWARE that allows the unit to function with the 5000 BOARD. The new 5000 BOARD OPERATING SOFTWARE will run the processors using a similar program as was used on the 500 BOARD. There are some minor SOFTWARE differences, such as new error codes, which will enhance the diagnostics procedures and which are explained in the Service Supplement. Also, in the near future we will be making available the 5000 BOARD as the service replacement board for the 270 RA Stand Alone Processor and the 480 RA Processor.

Processors No Longer in Production:

Processor Model	5000 Board Available at S. P.M.	Service Supplement Part No.	Service Supplement Available
270 RA Processor	July 2001	TBD	July 2001
480 RA Processor	July 2001	TBD	July 2001
460 RA Processor	Will continue to use 500 CIRCUIT BOARD		
270 RA Integrated Processor in a Multiloader 300	Will continue to use 500 CIRCUIT BOARD		

IMPORTANT: The 460 RA Processor and the 270 Integrated Processor will continue to use the 500 BOARD. The 5000 BOARD cannot be used in the 460 RA Processor or the 270 RA Integrated Processor, due to safety regulations.

When replacing a 500 board with a 5000 board for the first time, please note the following:

- **Record Custom Set Points:**

You will need to record any custom settings different from the original default settings that you may have stored in the memory on the 500 BOARD for:

- replenishment rates
- temperatures
- transport speeds

Once the new 5000 Board is installed, you must enter the custom set points that you recorded from the 500 BOARD.

IMPORTANT: When converting a 3000 RA Integrated PROCESSOR in a MULTILOADER 300 Plus, serial number 150, 249 and below, to a 5000 BOARD, you must install Modification No. 10, P/N 9229250, for the MULTILOADER 300 Plus. Modification No. 10 is new OPERATING SOFTWARE for the MULTILOADER 300 Plus and is included with the 5000 BOARD CONVERSION KIT, 4E5490.

New Part Numbers:

Part No.	Description	Includes		Comments
4E5490	5000 BOARD CONVERSION KIT	6E5142	5000 BOARD, PKD. with INSTRUCTIONS	<p>Order this kit when converting the following processors from a 500 BOARD to a 5000 BOARD:</p> <ul style="list-style-type: none"> • 180 LP/LPS • 3000 RA Integrated <p>This kit includes all the parts and instructions needed to convert from a 500 BOARD to a 5000 BOARD.</p>
		6E5132	180LPS CONVERSION KIT	
		6E5137	OPERATING SOFTWARE DISKS for use with a 5000 CIRCUIT BOARD	
		7E6705	DIAGNOSTICS DISK for use with a 5000 CIRCUIT BOARD	
		979762	CLOCK/MEMORY MODULE	
		9229250	MODIFICATION NO. 10 for the MULTILOADER 300 Plus	
6E5142	5000 BOARD, PKD. with INSTRUCTIONS	6E5138	5000 BOARD INSTALLATION INSTRUCTIONS	<p>Order this part when you are replacing an existing 5000 BOARD in the following processors:</p> <ul style="list-style-type: none"> • 5000 RA • 3000 RA • 180 LP/LPS • 3000 RA Integrated.
6E5137	PROCESSOR OPERATING SOFTWARE DISKS for use with a 5000 CIRCUIT BOARD	6E5135	INSTALLATION INSTRUCTIONS for the PROCESSOR OPERATING SOFTWARE	<p>Includes 2 diskettes with operating software for use with the following processors with a 5000 BOARD:</p> <ul style="list-style-type: none"> • 5000 RA • 3000 RA • 180 LP/LPS • 3000 RA INT
7E6705	PROCESSOR DIAGNOSTICS DISK for use with a 5000 CIRCUIT BOARD	7E6487	INSTALLATION INSTRUCTIONS for the PROCESSOR DIAGNOSTIC SOFTWARE	<p>Includes 1 diskette with diagnostic software for use with the following processors with a 5000 BOARD:</p> <ul style="list-style-type: none"> • 180 LP/LPS • 3000 RA INT
6E5132	180 LP/LPS CONVERSION KIT	Misc. parts	Needed to re-route the electrical harness on a 180 LP/LPS processor	The procedure to re-route the harness is simple and is explained in the INSTALLATION INSTRUCTIONS for the 5000 BOARD, 6E5138.
		2E4321	SPECIAL CONNECTOR	Needed for 180 LP without a sorter.
		7E6682	LABEL	Label indicating a unit has been converted to a 5000 BOARD. For use on all converted models.

New Service Documentation for Use with a 5000 BOARD:

A supplement to the SERVICE BINDER as well as new INSTALLATION INSTRUCTIONS for the 5000 BOARD, new OPERATING SOFTWARE and new DIAGNOSTICS SOFTWARE will document the changes and aid with servicing the processor models affected.

Each supplement to the service binder will contain the following changes:

- New Diagnostics Manual, with new error codes and a new section on troubleshooting solid state relays
- New Parts List for the 5000 board and its components
- New Schematics and Wiring Diagrams
- New Operating Software menu flowchart (480 RA and 270 RA processors only).

PROCESSOR	SUPPLEMENT to the Service Binder	INSTALLATION INSTRUCTIONS for the 5000 CIRCUIT BOARD	INSTALLATION INSTRUCTIONS for the OPERATING SOFTWARE DISK for use with a 5000 CIRCUIT BOARD	INSTALLATION INSTRUCTIONS for the DIAGNOSTICS DISK for use with a 5000 CIRCUIT BOARD
180 LP/LPS	3E0810	6E5138	6E5135	7E6487
3000 RA Integrated	3E0811			
480 RA	<i>TBD</i>	6E5138	6E5135	Not Applicable
270 RA	<i>TBD</i>			

Please insert this information into the appropriate MANUALS in your SERVICE BINDER. If you need additional SERVICE SUPPLEMENT copies, refer to the table and order by part number from Service Parts Management.

NOTE: The publications listed in the above table, will be included in a mailing announcing the change from a 500 BOARD to a 5000 BOARD.

Deb Trubatch, Service Engineer- Rochester
Larry Weishaar, Service Engineer- Rochester

For More Information:

U.S. Distributors Contact:

Health Imaging
Customer Support Operations
1-800-336-4722

GCSS Personnel Contact:

Film Handling TAC
U.S.: 1-800-822-1414
Canada: 1-800-433-1414
International: 716-724-4675

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EASTMAN KODAK COMPANY



ROCHESTER, NY 14650